GOYOJO®

PORTABLE PCP AIR COMPRESSOR

Operating Instructions

GAC-S1



GOYOJO®

Product name: Portable PCP Air Compressor

Manufacturer: GOYOJO Industrial Technology(shenzhen) Co., Ltd

Address: Shenlan,No.1Lianteng Road, Guangming District,Shenzhen city, Guangdong Province,518107,China

E-mail: sign2@goyojo.com

Skype/ph/whatsapp: +8619924549574

EU REP
Apex CE Specialists GmbH
Grafenberger Allee 277-287
40237 Düsseldorf
Deutschland

UK AR
UK CROSSBORDER LIMITED
7 Bell Yard London WC2A 2JR
United Kingdom

MADE IN CHINA

FACEBOOK TWITTER

GOYOJO®

	**Warning - Safety First** To reduce the risk of injury or equipment damage, please read this instruction manual carefully before operating the unit.
	**Proper Disposal** 1. This product is subject to the European Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE). The symbol of a crossed-out wheeled bin indicates that this product and any of its marked accessories must be disposed of separately from household waste. 2. Please take it to an appropriate collection point for the recycling of electrical and electronic equipment.

Important Safety Precautions

- The GOYOJO Portable PCP Air Compressor can operate on either 115V/230V AC (selectable voltage) or 12V DC vehicle power. Cables for both power options are included.
- Never operate the compressor without first turning on the cooling fan.(Note: This unit is designed so that the fan starts automatically when plugged in and cannot be turned off manually. This prevents accidental overheating due to forgetting to activate the cooling system during operation.)
- This compressor is specifically designed for filling airguns equipped with an integrated air cylinder or buddy bottle, with a capacity of up to 1 liter (1000cc).
- To avoid overheating, it is recommended to allow the compressor to rest for 10 minutes after every 25 minutes of continuous operation.
- Do not use this compressor to fill SCUBA tanks or any air containers larger than 1 liter.
- Improper use or misuse may damage the compressor or your PCP airgun. Such damage is not covered under warranty.
- While the compressor's maximum output is 300 BAR (4,500 PSI / 30 MPa), always follow your airgun manufacturer's recommended fill pressure and never exceed its rated limit. It is also recommended to stop charging once pressure reaches 280 BAR (3,750 PSI / 28 MPa) to allow a safe margin.
- Always monitor the pressure on both the PCP airgun's pressure gauge and the compressor's built-in gauge simultaneously during operation.
- To prevent overheating, only operate the compressor in a well-ventilated environment.
- Always observe standard safety procedures when filling your PCP airgun.
- If the power cord is damaged, it must be replaced with a special cord or assembly available from the manufacturer or an authorized service agent.
- Before inflation, ensure that the bleed valve is fully tightened and the air cylinder is properly sealed. Once the compressor automatically stops after reaching the target pressure, always release the pressure via the bleed valve before disconnecting the fill hose — this step is critical for safety.

Usage by Children and Vulnerable Persons

1. This appliance may be used by children aged 8 years and older, and by persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge, only if they are supervised or have been instructed on safe use of the appliance and understand the associated risks.
2. Children must not play with the appliance.
3. Cleaning and routine maintenance must not be carried out by children without supervision.

FCC Compliance Information (USA Only)

Caution:

Any changes or modifications not expressly approved by the party responsible for compliance may void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

This device may not cause harmful interference, andThis device must accept any

GOYOJO®

interference received, including interference that may cause undesired operation.

Warning:

Modifications to this product not approved by the responsible party may result in loss of compliance with FCC regulations and void the user's right to operate the device.

Note:

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are intended to provide reasonable protection against harmful interference in residential installations.

This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

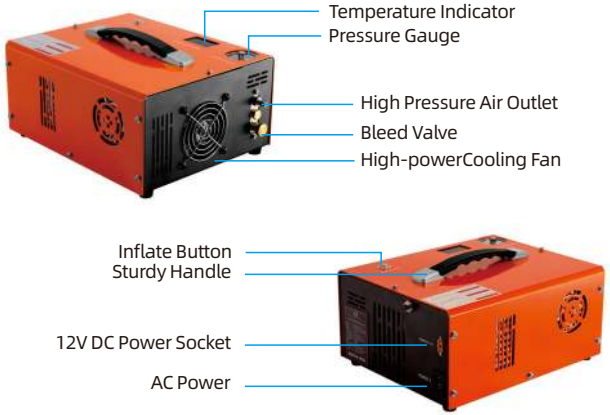
If interference does occur, which can be determined by turning the unit off and on, the user is encouraged to try the following measures to correct the issue:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and the receiver.
- Connect the device to a power outlet on a circuit different from the one the receiver is connected to.
- Consult your dealer or an experienced radio/TV technician for assistance.

Product Specifications

Brand	GOYOJO
Model	GAC-S1
Operating Voltage	DC 12V (vehicle battery) / AC 115V/230V
Power Output	300W
Maximum Pressure	4,500 PSI / 30 MPa
Shut-off Mode	Automatic Stop
Cooling System	Built-in Fan Cooling
Product Size	4.921inX11.02inX8.6in(2.5cmX28cmX22cm)
Included Accessories	Power Cord ×1 Spare Parts Kit ×1 User Manual ×1 8mm Connector ×1 Alligator Clips ×1

Product Appearance



GOYOJO®

Operating Instructions - Getting Started

Before Inflation (Testing Compressor Functionality)

1.Check the Operating Voltage

Before use, inspect and confirm the correct working voltage by checking the selector switch located on the bottom of the compressor. Ensure it matches your power source.



2.Attach the Hose to the Compressor Output

Connect the hose (fitted with a male Foster connector) to the air output port on the front of the compressor. Ensure the coupling is properly and tightly locked in place.



3.Connect the Fill Hose and Block the Outlet

Seal the other end of the hose using an air-blocking plug.



4.Connect to Power Supply

Plug the included AC power cord into the power port on the right-hand side of the compressor. Then plug the three-prong plug into a wall outlet that matches the selected voltage.



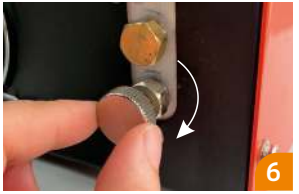
5.Set the Auto Shut-Off Pressure

Manually rotate the needle on the automatic shut-off pressure gauge to set your desired pressure level.



6.Tighten the Bleed Valve

Turn the air bleed valve on the front of the unit clockwise to close it.



7.Press the Inflation Button

Press the power/inflation button to start the compressor. The unit will begin to pressurize the sealed system.



GOYOJO®

8.Automatic Shut-Off at Target Pressure

Once the preset pressure is reached, the compressor will automatically stop.

(Note: The cooling fan will continue running to help dissipate heat—this is normal.)

9.Release Pressure Before Disconnecting

After inflation is complete, always open the bleed valve to release pressure. Wait until the pressure gauge needle returns to zero, indicating full depressurization. Only then remove the air-blocking plug to proceed with actual filling.



- If all steps above are completed successfully, it indicates the compressor is functioning correctly. You may now proceed to charge your intended air cylinder.
- Connect to Your PCP Airgun or Cylinder

Charging Your PCP Airgun or Cylinder

Once functionality testing is complete, you may begin actual charging:

1.Check for Airtightness, Then Connect the Fill Hose

Inspect your air cylinder or PCP airgun to ensure proper sealing.

2.Attach the Hose to the Compressor Output

Connect the hose (fitted with a male Foster connector) to the air output port on the front of the compressor. Ensure the coupling is properly and tightly locked in place.



3.Attach the quick-connect female coupler on the fill hose to the air inlet of your PCP airgun, air bottle, or airsoft product.

Ensure the connection is secure and leak-free.



4.Set the Auto Shut-Off Pressure

Manually rotate the needle on the automatic shut-off pressure gauge to set your desired pressure level.

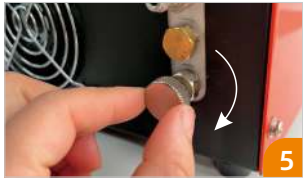


GOYOJO®

5.Close the Bleed Valve

Turn the bleed valve on the front of the unit clockwise to close it.

Finger-tight is sufficient — do not overtighten.



6.Start the Compressor

Press the POWER button on the top of the unit.

The compressor will start operating and begin filling the connected air cylinder.



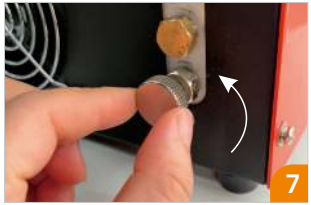
7.Automatic Shut-Off at Target Pressure

The compressor will automatically stop once the preset pressure is reached.

(Note: The cooling fan will continue running to dissipate residual heat — this is normal behavior.)

8.Release Pressure Before Disconnecting

After inflation is complete, always open the bleed valve to release internal pressure.



- Wait until the pressure gauge needle drops to zero, indicating full depressurization.
- Only then disconnect the fill hose from the airgun or cylinder.

Using a 12V Car Battery (DC Mode)

DC Power Connection Steps:

1.Ensure your vehicle's engine is running before powering the unit.

2.Connect the supplied DC power cable to the 12V socket on the right side of the compressor.

3.Attach the red alligator clip to the positive (+) terminal of your car battery.

4.Attach the black alligator clip to the negative (-) terminal.

The remaining steps are the same as above.





Important Notes on Temperature & Auto Shut-Off

If the compressor temperature exceeds 80°C (176°F), you must manually stop the compressor:

- Press the POWER button to stop compression.
- Keep the cooling fan running to aid heat dissipation.
- Once the unit cools down, you may restart the compressor.
- To protect the motor, the compressor features an automatic 30-minute shut-off

GOYOJO®

Routine Maintenance

Note:

We recommend performing routine maintenance after filling approximately 50 bottles (500cc each) or after 20 cumulative hours of use, whichever comes first.

This includes cleaning debris and replacing worn O-rings.

WARNING:

Always disconnect all power sources before performing any maintenance!

Disassembly & Cleaning Steps

1.Remove the Metal Housing

Loosen all 12 screws on the compressor housing:(5 on the front, 5 on the back, 2 on the top)

Carefully lift off the metal casing — handle gently to avoid damaging internal wiring.



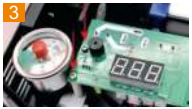
2.Disconnect the Temperature Sensor Wire

Unscrew the sensor cable from the cylinder.



3.Detach Display Screws

Loosen the 2 screws located on the left side of the display module.



4.Disconnect Power Wires from Motor

Loosen the 2 screws securing the red (OUT +) and black (OUT -) motor wires.



5.Remove Condensation Tube Screws

Loosen the 2 screws connected to the condensation tube.



6.Remove the Motor Screws

Unscrew the 4 base screws holding the motor to the compressor frame.



7.Detach Condensation Tube from Cylinder

With the motor and cylinder assembly removed, unscrew the 2 screws securing the tube to the cylinder.



8.Loosen the Smaller Outer Screw

Important: Only loosen the smaller outer screw, not the larger one.



9.Remove the Piston Rod Screws

Use a hex key to remove the 2 black screws on the end of the piston rod.



10.Detach Cylinder Head

Unscrew the 4 top screws on the cylinder to remove the entire cylinder head assembly.



11.Clean Round Metal Parts

Remove the round metal component, clean any dirt, and inspect for damaged O-rings.

Apply a thin layer of silicone or engine oil to the inner O-rings if needed.



12.Clean Column Metal Part

Remove and clean this part thoroughly. Re-lubricate the interior surface with silicone or engine oil.



GOYOJO®

13.Separate Piston Assembly

Detach the piston from the square metal part, clean all components, and check for O-ring damage.

It's normal if the light gray O-ring appears broken—this part is designed to wear with time.



14.Clean the Inside of the Square Block

Remove any dirt or buildup inside the square-shaped metal housing.



15.Clean the One-Way Metal Sheet

Loosen the screw holding the one-way valve plate, clean the area, and re-tighten the screw.

IMPORTANT: Do not over-tighten this screw. Air must be able to exit through this section.



16.Clean the One-Way Valve

Unscrew the one-way valve cap and remove the valve and spring.

Clean thoroughly and check for damage.



17.Reassemble One-Way Valve

When reassembling:

The metal valve face should be inward,

The spring should face outward.

Lightly tighten the cap screw.



18.Inspect and Lubricate Piston O-Rings

Check all piston O-rings for damage or wear.

Apply a thin coat of silicone or engine oil to the two small O-rings.

Maintenance Complete!



To ensure proper reassembly, we recommend watching the instructional video during the process:

Watch Here: https://youtu.be/jeKo7dqSfnM

GOYOJO®

Assembly Instructions

1.Insert the Piston into the Column

Place the piston into the column metal part.

Ensure the bottom of the piston sits flush with the base of the column.



2.Install the Round Component

Insert the round-shaped metal part into the column.



3.Install the Square Component

Attach the square-shaped part to the opposite end of the round part.

Ensure tight contact with no visible gaps between components.



4.Lubricate Internally

Gently move the piston back and forth and rotate it using a tool.

Repeat this motion 3–4 times to distribute internal oil evenly.



5.Align Components for Assembly

Rotate the square part, round part, and piston to align them as shown in the reference diagram (Step 3.5).

Ensure all screws and the piston rod are facing the correct direction.

Pull the piston rod to its fully extended position.



6.Mount the Cylinder to the Motor

Align and fasten the cylinder to the motor using four black screws.

Pay attention to the direction of the three red-arrow-marked screws as incorrect orientation may affect performance.

7.Secure the Piston Rod

Use two black screws to connect the piston rod to the motor rod.

Tip: You may gently rotate the motor screws with a hex key to align the holes for easier screw insertion.

8.Install the Condensation Tube onto the Cylinder

9.Reinstall the Motor and Cylinder Assembly

Place the assembly back into the compressor base and tighten four black screws at the bottom.











GOYOJO®

10.Install the Second Condensation Tube

11.Reconnect Motor Wires to Display Panel

Connect the red wire to OUT+ and the black wire to OUT-.

12.Reconnect the Temperature Sensor Wire Secure it back to the cylinder.

13.Reinstall the Display Panel









Troubleshooting - Error Codes

CODE	DESCRIPTION
E0	Temperature sensor malfunction.
E1	Automatic shutdown triggered when temperature exceeds 85°C.
E2	Input voltage too low (below 9.8V).
E3	Pressure setting button failure.
E4	Automatic shutdown due to maximum working time reached or target pressure achieved.

Thank You

Thank you for choosing GOYOJO.

We sincerely appreciate your trust in our product. If you encounter any issues during use, please don't hesitate to contact us by email at sign2@goyojo.com. Our support team will review your concerns and assist you in resolving the problem as quickly as possible.

We also welcome any feedback or suggestions for improvement—your input helps us continue to grow and serve you better.